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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,206	07/09/2003	Cheol-Ung Jang	4591-332	4195

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EXAMINER

AUDUONG, GENE NGHIA

ART UNIT PAPER NUMBER

2818

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/618,206

Applicant(s)

JANG ET AL.

Examiner

Gene N Auduong

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Sukegawa (U.S. Pat. No. 5,812,814).

Regarding claim 1, Sukegawa discloses a semiconductor memory device (figure 1a), comprising: a first chip (flash EEPROM chip 101) adapted to generate a first ready/busy signal (R/B signal), the first ready/busy signal indicating the first chip is busy; and a second chip (flash EEPROM chip 102) adapted to generate a second ready/busy signal (R/B signal), the second ready/busy signal indicating the second chip is busy; where the first ready/busy signal is distinct from the second ready/busy signal (col. 4, lines 23+).

Regarding claim 2, Sukegawa disclose the semiconductor memory device having all of the limitation as of claim 1 where the first chip (flash 101) is adapted to operate responsive to a first chip enable signal (chip select signal CS1); and where the second chip (flash 102) is adapted to operate responsive to a second chip enable signal (chip select signal CS2).

Art Unit: 2818

Regarding claim 3, Sukegawa disclose the semiconductor memory device having all of the limitation as of claim 1 where the first and second chips are adapted to operate responsive to control signals from a host (memory chips in the device response to control signals from a host system; col. 4, lines 23+; col. 5, lines 18+).

Claims 6-8 claiming the similar limitation as previously discussed in claims 1-3.

Therefore, they are analyzed as previously discussed with respect to claims 1-3.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-5 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sukegawa (U.S. Pat. No. 5,812,814).

Regarding claims 4-5 and 9-10, Sukegawa discloses the semiconductor memory device having all of the limitation as of claim 1. Sukegawa further discloses a third chip (flash EEPROM chip 103) connected in parallel with the first chip (flash EEPROM chip 101); and a fourth chip (fourth EEPROM chip 104) connected in parallel with the second chip (flash EEPROM chip 102) but fails to disclose wherein the first ready/busy signal R/B indicates the third chip is busy; and where the second ready/busy signal indicates the fourth chip is busy; and wherein the third chip is adapted to operate responsive to a first chip enable signal; and where the fourth chip is adapted to operate responsive to a second chip enable signal. However, each control signal for controlling only one memory chip in the device or controlling plurality on

Art Unit: 2818

memory chips in the device. It would have been obvious matter of design choice to have the control signal to control only one memory chip or plurality memory chip in the device, since applicant has not disclosed that particular purpose and it appears that the invention would perform equally well for only memory chip or plurality memory chip.

*Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gene N Auduong whose telephone number is (571) 272-1773.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA  
September 10, 2004



Gene N Auduong  
Primary Examiner  
Art Unit 2818